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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,823	01/17/2002	William J. Colucci	7391/72568	5347

42798 7590 08/09/2005

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EXAMINER
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TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/046,823

Applicant(s)

COLUCCI ET AL.

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9, 10, 14, 18-22, 30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9, 10, 14, 18-22, 30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on May 24, 2005 has been entered.

2. This Office action is in response to the amendment filed March 29, 2005 in which claims 9, 10, 14, and 18-20 were amended.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 9, 10, 14, 18-20 and 30-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not support the language "at least one unreacted polyalkene derived from C<sub>2</sub>-C<sub>20</sub> alkenes". The only recitation regarding

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unreacted polyalkene is in the examples. In these examples, applicant uses PIB. There is no indication that applicant contemplated adding any other unreacted polyalkenes to the formulations.

With respect to claims 30 and 31, the specification does not support a number average molecular weight of about 208 for PIB-cresol. This molecular weight was taken directly from Sample B wherein the PIB group has a number average molecular weight of 208. This weight is a precise weight and not an approximation. By amending the claims to read "about 208", applicant is attempting to broaden parameters for this very specific example.

Applicant argues that support for the claimed limitation is found in the broad disclosure of R having a number average molecular weight of 20 to 2500 and from about 350 to 1500 and also R being described as derived from C<sub>2</sub>-C<sub>20</sub> alkenes, without limitation to a particular molecular weight range.

It is clear from reading the specification that R has a minimum molecular weight of about 200. It is also clear that the alkenes from which R is derived are the monomers and the polymers. Therefore, R-cresol cannot have a combined number average molecular weight of about 208.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stayner (US 2,786,745).

Stayner teaches a fuel oil composition comprising a mixture of predominantly oil-soluble polyoxyalkylene ethers of alkyl phenols (see col. 1, lines 15-31; col. 2, lines 56-69). The compounds are prepared by alkylating phenol with an olefin containing 10-20 carbon atoms, such as those obtained by polymerizing straight and branched butylenes. Olefins containing 20 C atoms meet the limitation regarding the molecular weight of the claimed R group. The alkyl phenols produced in the alkylation process are then adducted with 8-40 moles of an alkylene oxide such as ethylene, propylene or butylene (see col. 3, lines 7-26). Stayner teaches that water is removed from the resultant product as well as a part of the unreacted olefin (see col. 3, lines 49-71). This teaching of unreacted olefins renders obvious component (ii) of the present invention. The fuel may be furnace oils, burner oils, diesel fuels and jet fuel (see col. 1, lines 25-31; col. 9, line 72 through col. 10, lines 1-2). Stayner teaches that the additive is present in the fuel in an amount of 1% by weight or less (see col. 10, lines 3-8). The composition may contain fuel additives (see col. 8, lines 32 through col. 9, lines 1-28). Stayner teaches the limitations of the claims other than the difference that is discussed below.

Stayner differs from the claims in that he does not specifically teach that the aromatic component is cresol. However, no unobviousness is seen in this

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difference because cresol and phenol are structurally similar and it would be reasonable to expect that these compounds would function in a similar manner.

5. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stayner and EP 827999.

Stayner has been discussed above. Stayner fails to teach that the fuel composition of his invention contains a Mannich base detergent. However, EP teaches this difference (see abstract).

It would have been obvious to one of ordinary skill in the art to include a Mannich base detergent because EP teaches that these compounds reduce or inhibit engine deposits and improve engine performance (see page 1, lines 1-9, 13-20).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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